

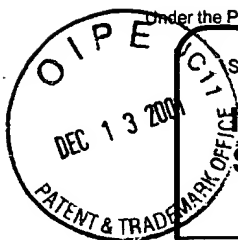
Please type a plus sign (+) inside this box.

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number 09/884,659
Filing Date 6/19/2001
First Named Inventor Brian Hinman
Group Art Unit 2631
Examiner Name Unknown
Attorney Docket Number PA1580US

RECEIVED
DEC 18 2001
Technology Center 2600

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
LH		5,095,528		Leslie, et al.	03-10-1992	
		5,790,174		Richard, III et al.	08-04-1998	
		6,029,048		Treatch	02-22-2000	
		3,180,938		Glomb	04-27-1965	
		3,548,120		Tarasoff	12-15-1970	
		3,873,936		Cho	03-25-1975	
		3,944,723		Fong	03-16-1976	
		3,962,549		Zuk	06-08-1976	
		4,025,737		Brewer	05-24-1977	
		4,131,859		Valle	12-26-1978	
		4,242,542		Kimbrough	12-30-1980	
		4,392,225		Wortman	07-05-1983	
		4,462,105		Wagner, et al.	07-24-1984	
		4,583,220		Blackburn, et al.	04-15-1986	
		4,656,628		Tan	04-07-1987	
		4,667,319		Chum	05-19-1987	
LH		4,766,606		Bardutz, et al.	08-23-1988	
		5,181,198		Lechleider	01-19-1993	
		5,394,401		Patrick, et al.	02-28-1995	
		5,455,538		Kobayashi, et al.	10-03-1995	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner
Signature

Quirwa


Date
Considered

6/29/00

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 1 of 6		First Named Inventor: Brian L. Hinman	RECEIVED FEB 23 2004 Technology Center 2600
		Filing Date: 6/19/2001	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
<i>[Handwritten mark]</i>		4,970,722		Preschutti	11/13/1990	
		5,912,895		Terry et al.	6/15/1999	
		4,277,655		Surprenant	7/7/1981	
		4,259,642		Derby	3/31/1981	
		5,892,756		Murphy	4/6/1999	
		6,154,524		Bremer	11/28/2000	
		6,005,873		Amit	12/21/1999	
		6,091,722		Russell et al.	7/18/2000	
		6,084,931		Powell, II et al.	7/4/2000	
		5,623,485		Bi	4/22/1997	
		6,351,493	B1	Tarraf	2/26/2002	
		6,343,114	B1	Chea, Jr.	1/29/2002	
<i>[Handwritten mark]</i>		6,058,162		Nelson et al.	5/2/2000	

FOREIGN PATENT DOCUMENTS

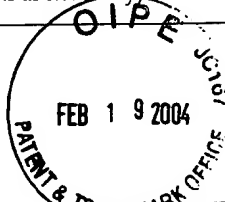
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³ Code ⁵	Number ⁴	Kind (If known)				

Examiner Signature	<i>[Handwritten Signature]</i>	Date Considered	6/29/00
--------------------	--------------------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 2 of 6		First Named Inventor: Brian L. Hinman	RECEIVED FEB 23 2004 Technology Center 2600
		Filing Date: 6/19/2001	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
		US 2002/0001340	A1	Shenoi et al.	1/3/2002	
		US 2002/0106076	A1	Norrell et al.	8/8/2002	
		5,929,402		Charles et al.	7/27/1999	
		6,281,454	B1	Charles et al.	8/28/2001	
		761,995		Pupin	6/7/1904	
		US 2002/0113649	A1	Tambe et al.	8/22/2002	
		3,848,098		Pinel	11/12/1974	
		3,476,883		Birck et al.	11/4/1969	
		1,711,653		Quarles	5/7/1929	
		6,208,670		Milliron et al.	3/27/2001	
		6,385,234	B1	Ashley	5/7/2002	
		6,385,252	B1	Gradi et al.	5/7/2002	
		6,385,253	B1	Swisher	5/7/2002	

FOREIGN PATENT DOCUMENTS

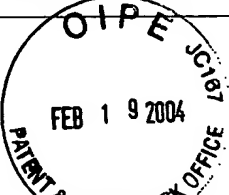
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³ Code ⁵	Number ⁴	Kind (If known)				

Examiner Signature		Date Considered	6/29/04
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 3 of 6		First Named Inventor: Brian L. Hinman	RECEIVED FEB 23 2004 Technology Center 2600
		Filing Date: 6/19/2001	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
<i>LM</i>		6,226,322	B1	Mukherjee	5/1/2001	
		6,345,072	B1	Liu et al.	2/5/2002	
		6,507,606	B2	Shenoi et al.	1/14/2003	
		4,768,188		Barnhart et al.	8/30/1988	
		4,788,657		Douglas et al.	11/29/1988	
		5,049,832		Cavers	9/17/1991	
		5,736,949		Ong et al.	4/7/1998	
		5,859,895		Pomp et al.	1/12/1999	
		5,991,311		Long et al.	11/23/1999	
		6,047,222		Burns et al.	4/4/2000	
		6,128,300		Horton	10/3/2000	
		6,195,414	B1	Simmons et al.	2/27/2001	
<i>LM</i>		6,246,695	B1	Seaholtz et al.	6/12/2001	

FOREIGN PATENT DOCUMENTS

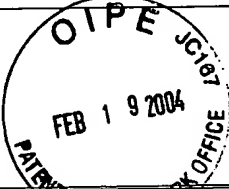
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³ Code ⁵	Number ⁴	Kind (If known)				

Examiner Signature	<i>James [Signature]</i>	Date Considered	6/29/04
-----------------------	--------------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 4 of 6		First Named Inventor: Brian L. Hinman	RECEIVED FEB 23 2004 Technology Center 2600
		Filing Date: 6/19/2001	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
<i>[initials]</i>		6,263,047	B1	Randle et al.	7/17/2001	
		6,266,348	B1	Gross et al.	7/24/2001	
		6,266,395	B1	Liu et al.	7/24/2001	
		6,370,188	B1	Wu et al.	4/9/2002	
		6,188,669	B1	Bellenger	2/13/2001	
		6,345,071	B1	Hamdi	2/5/2002	
		5,909,445		Schneider	6/1/1999	
		6,236,714	B1	Zheng et al.	5/22/2001	
		6,546,100	B1	Drew	4/8/2003	
		6,262,972	B1	McGinn et al.	7/17/2001	
		6,236,664	B1	Erreygers	5/22/2001	
		5,724,344		Beck	3/3/1998	
<i>[initials]</i>		6,091,713		Lechleider et al.	7/18/2000	

FOREIGN PATENT DOCUMENTS


Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³ Code ⁵	Number ⁴	Kind (If known)				

Examiner Signature	<i>[Signature]</i>	Date Considered	6/29/04
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 5 of 6	First Named Inventor: Brian L. Hinman	<div style="text-align: center;"> RECEIVED FEB 23 2004 Technology Center 2600 </div>
	Filing Date: 6/19/2001	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

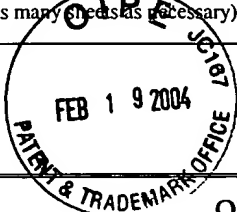
Examiner Signature	<i>Laura J. H.</i>	Date Considered	6/29/04
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 6491.P033	Application Number: 09/884,659
Page 6 of 6	First Named Inventor: Brian Hinman	RECEIVED
	Filing Date: 6/19/2001	



OTHER ART - NO PATENT LITERATURE DOCUMENTS Technology Center 2600

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
<i>LH</i>		"Reference Data for Radio Engineers", Published by the Federal Telephone and Radio Corporation as associate of International Telephone and Telegraph Corporation, Copyright 1943, pp. 3.	
<i>LH</i>		TODD BAKER, "The Challenges of Implementing", Tektronix, October 1998 CTE Report, http://www.tektronix.org/Measurement/commtest/cte_reports/27/xdsl.html?view=print&page=http://ww , pp. 5.	
<i>LH</i>		VINCE VITTORE, "TELEPHONY Making DSL go for the long run", http://industryclick.com/magazinearticle.asp?magazinearticleid=7521&magazineid=7&mode=print , December 11, 2000, pp. 2.	

Examiner Signature	<i>[Signature]</i>	Date Considered	<i>6/29/04</i>
-----------------------	--------------------	--------------------	----------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.